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ABSTRACT

Collaborative school cultures have been associated with achieving various school reform objectives for both teachers and students. One central dimension of school restructuring is the empowerment of teachers within a school culture that is both shared and technical. Little is known about how such cultures develop and whether or how school administrators can facilitate that process. This report describes results of a study examining administrator practices in 12 Ontario (Canada) schools that had developed highly collaborative professional relationships over a 3-year period in the context of school improvement initiatives. The study specifically examined the extent to which these schools had achieved collaborative cultures, the significance of improvement processes, and the strategies used by administrators to develop more collaborative school cultures. Data were collected by two interviewers during a 2-day visit to each school. A causal network was developed for each school and analyzed to form various matrices (event by time, role by time, etc.). Results showed that school cultures demonstrated relatively extensive collaboration. The relationship between strategies initiated by administrators is neither simple nor direct. Administrators used six broad strategies to influence school cultures, including: strengthening the school culture; employing various bureaucratic mechanisms to stimulate and reinforce cultural change; fostering staff development; communicating directly about cultural norms, values, and beliefs; sharing power and responsibility with others; and using symbols to express cultural values. (45 references) (MLH)

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Transformational Leadership:

How Principals Can Help Reform School Cultures

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Abstract

Collaborative school cultures have been associated with the achievement of a number of school reform objectives for both teachers and students. Little is known, however, about how such cultures develop and whether or how school administrators can facilitate that process. This study examined the practices of administrators in each of 12 schools which had developed highly collaborative professional relationships over a three year period in the context of school improvement initiatives. Results suggest the feasibility of developing more collaborative school cultures in a relatively brief period of time and clarify the role played by the larger context of school improvement for fostering collaboration. Specific strategies used by the administrators are described. These strategies are associated with a concept of leadership termed "transformational".

Transformational Leadership:
How Principals Can Help Reform School Cultures

Kenneth Leithwood and Doris Jantzi

Current reform initiatives in Canada, the U.S., Australia and a number of other developed countries are calling for the restructuring of schools. One central dimension of such restructuring is the empowerment of teachers within a school culture that is both shared and technical (Gideonese, 1988). Such cultures not only foster the types of outcomes for students that are valued by educational reformers but stimulate continuous professional growth among teachers, as well (Rosenholtz, 1989; Little, 1982).

While evidence about the positive effects of shared, technical, school cultures is growing rapidly, very little is known about how they develop (Joyce, 1990; Fullan, 1990). Furthermore, there has been very little empirical research inquiring directly into what principals might do to assist such development, although much evidence has accumulated in support of the principal as a crucial agent in realizing a number of other important reform objectives (Leithwood, Cousins & Begley, in press). To fill this void, we initiated the study reported in this paper loosely guided by a conception of school leadership we termed "transformational". Although not created by us, this view of leadership had proven especially useful for interpreting the results of a prior study comparing the processes engaged in by typical and effective principals while solving problems with groups of teachers in their schools (Leithwood & Steinbach, in press). Indeed, this experience led us to believe that "transformational leadership", while still vaguely specified, nevertheless was a promising conception of the type of leadership required to meet many school reform objectives, not least the development of a collaborative or shared, technical culture. Given this belief, our study was designed to stimulate greater conceptual clarity about transformational leadership and learn more about the specific nature and effects of strategies associated with such leadership.

Framework

School Culture

Culture may be defined as:

> ...a system of ordinary, taken-for-granted meanings and symbols with both explicit and implicit content that is, deliberately and non-deliberately, learned and shared among members of naturally bounded social group. (Erickson, 1987, p. 12)

A school's culture consists of meanings shared by those inhabiting the school. As well, schools may include several sub-cultures; for example, a student sub-culture and a professional staff sub-culture, the focus of this study.

Attention to school culture, as part of school reform, is driven by evidence that traditional school cultures, based on norms of autonomy and isolation, create a work context in which realizing the central aspirations of school reform is highly unlikely. Such norms begin to develop early in a teacher's career, perhaps during teacher training (Su, 1990). Isolated cultures have been described by Feiman-Nemser and Floden (1986) in terms of norms of interaction with students, teachers, administrators and parents. Norms of authority and discipline along with a competing need for close personal bonds characterize teachers' interactions with students. Typical norms act to isolate teachers from asking their peers for or offering to their peers professional advice. Teachers, it has been said, have peers but no colleagues. School administrators are valued by teachers when they act as buffers from outside pressures and maintain school discipline, but not if they interfere in daily routines or instructional decisions. Parents are valued as supports for the teacher's plans and practices but are not expected to "interfere" in those plans. As a whole, these traditional norms of interaction create a highly autonomous professional culture, one that is clearly adaptive under some conditions, such as: traditional expectations for student outcomes in some types of schools; administrators unable to provide instructional leadership; little public interest in accountability and modest expectations for the contribution of schools to society with few external pressures for change; prevailing images of teaching as craft (or art) based on limited technical know-how; and traditional contributions by the family to the development of students.

Since most of these conditions no longer prevail in many schools, it is not surprising to find evidence of a different teaching culture emerging. (e.g., Little, 1982, 1987; Rosenholtz, 1989; Nias et al, 1982; Schneider & Hochschild, 1988). This culture is student centered and based on norms of interaction with students that are supportive and positive; while discipline is maintained it is obviously to serve the interests of learning rather than an end in its own right. Teachers have a shared, technical culture built on norms of collegiality, collaborative planning and continuous improvement. Staff and the student body are cohesive and have a strong sense of community. There is reciprocity between and among staff and students. Administrators are expected to offer instructional leadership and parents are considered co-partners in the education of students wherever possible. Such a culture appears to be adaptive to increasingly prevalent conditions associated with calls for reform such as: new and more complex expectations for student outcomes, administrators able to provide instructional leadership; high expectations by the public for its schools and many associated, external pressures for change; a rapidly expanding body of technical know-how concerning instruction; and changing family environments. This culture is central to the "second wave" of reform in the United States (e.g., Bacharach, 1988). Gideonese (1988) characterizes it as a "revolutionary transformation" in the teaching profession and Fullan and Connelly (1987) use it as the basis for their recommendations for reforming teacher education in Ontario. Our study was concerned with leadership strategies which helped foster the development of this type of school culture.

Recently, Andy Hargreaves (1990) has identified two forms of teaching cultures in addition to those we have referred to as isolated and (truly) collaborative. "Balkanized" cultures, common in secondary schools with department structures, feature substantial collaboration within teaching sub-groups but little or no significant collaboration across such groups. "Contrived" collaboration exists where professional interaction is mandated (perhaps by a school administrator) but where the norms of the participants would not support such interaction if the mandate were removed.

Hargreaves & Wignall (1990) have also provided compelling reasons why, even within the context of school cultures which strongly support collaboration, there are legitimate reasons for continuing to value teachers' individuality. An ethic of care, posits Hargreaves, drives many teachers to spend as much time as possible in contact with their students. Further, while the benefits of collegiality may include spurs to

creativity and effective professional problem solving, solitude may sometimes offer the same advantages for some people. Among the goals for cultural change, then, would seem to be: the removal of "administrative or other situational constraints" (Hargreaves & Wignall, 1990, p. 15) to collegial work; the creation of norms of collegiality which nevertheless acknowledge the value of individual, autonomous work on some matters; and the development of forms of collegial work which maximize the potential of shared problem solving.

Transformational Leadership

We assumed, for purposes of this study, that school administrators who contribute to the achievement of those goals for cultural change outlined above exercise some aspects of what we understand to be transformational leadership. This is an assumption also shared by Sashkin and Sashkin (1990) and Foster (1989).

The term "transform" implies major changes in the form, nature, function and/or potential of some phenomenon; applied to leadership, it specifies general ends to be pursued although it is largely mute with respect to means. From this beginning, we considered the most generic purpose of transformational leadership to be the enhancement of individual and collective problem-solving capacities of organizational members; such capacities are exercised in the identification of goals to be achieved and practices to be used in their achievement.

Three selected studies are especially helpful in further clarifying the purposes of transformational leadership. Bennis and Nanus (1985) viewed leaders as transformative when they were able to "shape and elevate the motives and goals of followers (p.217)". Such leadership, they suggested further:

> ...is collective, there is a symbolic relationship between leaders and followers and what makes it collective is the subtle interplay between the followers' needs and wants and the leader's capacity to understand ...these collective aspirations (p. 217).

Coleman and and La Rocque's studies of the leadership of especially effective superintendents (e.g., La Rocque and Coleman, in press) showed how these people developed a symbolic relationship through their focus on school district cultures. These

superintendents were strongly committed to an ethic of client service and had a well-developed vision of what that entailed; they also encouraged a norm of "mutual influence" and respect in their relations with school staffs. This norm manifested itself most directly in shared decision-making about most significant issues faced by the districts.

Leithwood and Steinbach (in press) further developed the concept of transformational leadership in their study of how principals solved problems with groups of teachers. In particular, they provided evidence that highly effective (transformational) principals, worked with teachers in groups in order to (a) develop better solutions to immediate problems; (b) stimulate greater motivation and commitment on the part of teachers to a shared set of defensible goals regarding the implementation of such solutions; and (c) contribute to long term growth in the problem solving capacities of teachers. To develop better solutions, these principals appeared to work implicitly from an understanding of what Simon (1957) termed "bounded rationality. " This phrase draws attention to the limitations in a person's capacity to process information, in the face of the complex demands placed on that processing by frequently encountered problems. The limited capacity of short term memory was a particular interest to Simon and others who elaborated the idea. As Shulman and Carey (1984) explain, however, bounded rationality focused exclusively on individual cognition and did not adequately recognize how individuals "participate in jointly produced social and cultural systems of meaning that transcend individuals" (1984, p. 503). Because human rationality "...whether bounded or not, is practiced in the context of social exchange and human interaction" (p. 515), a view of people as collectively rational is offered as a better conception of problem solving in many life circumstances. From such a view, problem solvers use others to compensate for their own cognitive limitations. They do this by transforming, redefining and distributing parts of the problem task to others in the working group in an opportunistic way according to each individual's unique abilities. More specifically, under ideal collaborative problem-solving conditions, better solutions seem likely to be the result of, for example: a broader range of perspectives from which to interpret the problem; an expanded array of potential solutions from which to choose; a richer, more concrete body of information about the context in which the problem must be solved; and the reduced likelihood of individually biased perspectives operating in the solution process. Effective principals in Leithwood and Steinbach's (in press) study were able to meet these conditions with their staffs.

Commitment to a shared set of defensible goals develops when teachers are encouraged, as did effective principals, to explicitly set relatively challenging, immediate, as well as long term goals. Relatively explicit goals provide a clearer basis for self evaluation than do ambiguous goals. Moderately difficult goals are more motivating than those which seem trivial because of their simplicity, or those which seem unrealistic because of their excessive difficulty. Relatively immediate or proximal goals (or subgoals) serve as greater stimulants to action than do remote goals, especially when there are competing demands on one's attention (Bandura, 1977). Interaction with one's colleagues about goals encourages goals with such properties because it requires one to put one's purposes in words and to be clear enough to explain one's purposes to others. Furthermore, the public nature of such interaction creates pressure to set goals which seem worthwhile to others and therefore not likely trivial. Continuous interaction about shared goals supplements, through the evaluation of others, one's own evaluation of discrepancies between performance and desired achievement. Finally, because they are worked out in a deliberative manner (with the aid of others), such goals are less likely to be remote or unrealistic.

Finally, effective principals observed by Leithwood and Steinbach (in press) also attempted to foster long term growth in the problem-solving capacities of teachers, perhaps their most fundamental contribution to teacher empowerment. How they did this can be explained using Vygotsky's (1978) concept of a "zone of proximal development". This notion has been used in research on peer interaction to help explain how such interaction may stimulate individual development among participants (e.g., Damon & Phelps, 1989). According to Vygotsky, an individual's independent problem solving is a function of processes in which they have participated in the past - for the most part processes involving interaction (or collaboration) with others. In this sense, an individual's independent problem solving capacity, at a given point in time, is an internalization of previously experienced, collaborative problem solving processes; it is their actual developmental level. The zone of proximal development:

> ...is the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving in collaboration with more capable peers (p. 86).

In the context of administrator-teacher and teacher-teacher collaborative problem solving, the long term growth of participants seems likely when, for example: the process used by the group is actually superior to the individual's independent problem solving and the individual participants recognize that superiority; there are opportunities for the group to reflect consciously on the process in which they are involved, to evaluate it and to participate in its refinement; individual members of the group compare their own independent problem solving with the group's processes and identify ways of increasing the robustness of their own independent processes. Effective principals were found to be meeting all but the third of these conditions.

These three studies permit a more refined conception of the purposes for transformational leadership. A transformational leader helps build shared meaning among members of the school staff regarding their purposes and creates high levels of commitment to the accomplishment of these purposes. Such leaders foster norms and beliefs among staff members about the contribution one's colleagues may make to one's practices. They also encourage openness to new ideas and practices, whatever their source, and careful assessment of such ideas and practices based on their own merits. Both individual and group reflection on purposes and practices and how they might be continuously improved are stimulated by the leader, including encouragement to periodically identify and assess the basic assumptions on which are founded these purposes and practices. These are purposes typically associated with the effects of collaborative school cultures, as well.

While the three studies discussed above, as well as several others (e.g., Firestone & Wilson, 1985; Rosenholtz, 1989) begin to clarify transformational leadership strategies also, such information is quite limited. We defer a discussion of such strategies to that section of the paper in which our own data about these strategies are reported.

Research questions

Three sets of questions guided the research. The first question concerned the extent to which the schools had achieved collaborative cultures and reasons for variation in degrees to which that had been been achieved. Because changes in culture seem likely to occur in the course of pursuing other goals, as well, this study was part of a more comprehensive analysis of school improvement processes. Therefore, our second

research question inquired about the significance of the larger set of improvement processes in which people engaged for the purpose of developing collaborative cultures? Finally, we asked about the strategies used by school administrators to develop more collaborative school cultures; answers to this question, we believed, would help further clarify qualities associated with transformational leadership.

Method

In a theory testing study with the general focus which has been outlined, transformational leadership would be considered the dependent variable and collaborative culture the independent variable. With a precise operational definition of transformational leadership strategies, we would create a research design to minimize as many competing explanations as possible for observed changes in school culture. The starting point for this study, however, was only a primitive conception of potentially useful leadership strategies and extremely limited empirical data about the relationship between such strategies and school culture. As a consequence, the study was designed to be exploratory and qualitative in nature.

Sample Selection

Twelve schools were selected for the study; six from a larger project on school improvement sponsored by Ontario's Ministry of Education and six not related to this project, but known to have been involved in serious improvement efforts. This number of schools was considered to be large enough to demonstrate diversity but small enough to be feasible with available resources.

Potential schools outside the Ministry project (6) were identified through a two step process; in the first step senior school board administrators, Ministry of Education officials and faculty of education professors were asked to nominate schools in their jurisdictions that had experienced significant improvement over the past several years and are now considered to be exemplary schools. This step resulted in the nomination of twenty-one schools, three and a half times the number we would be able to include in the study. As a second step we developed and administered a brief questionnaire that asked staffs in each nominated school to indicate the extent of the change that had taken place in their schools, key factors contributing to the change, the extent of planning involved and the nature of the improvement that had resulted, to date. Everyone who nominated a

school also was asked to complete the screening questionnaire as were the relevant central office administrators in the board. In the meantime, nominated schools were called to verify their willingness to participate in the study and to inform them of the screening questionnaire. One principal chose not to participate because he saw his school as always having been effective and not meeting our criterion of major improvement. Two elementary schools were dropped when preliminary discussions with the nominator and principals indicated there was no major change. Six questionnaires were sent to the eleven elementary schools and seven to the five secondary schools. Over 94% of the questionnaires were returned.

Results of the questionnaires were analyzed to determine the extent of agreement among respondents in each school about the extent and nature of the school improvement effort. Schools were then prioritized according to the results. Two additional criteria were taken into account in the final selection of the six schools: location and level. Schools were selected to avoid concentration within a district or a region and to ensure inclusion of secondary schools. The four elementary and two secondary schools selected were from six districts or boards of education.

Ministry of Education officials with close knowledge of the improvement efforts of schools in the larger study nominated 12 from among the approximately 40 schools associated with that study. The nominated schools were considered to be among those furtherest along in their improvement efforts. Nominators also obtained the principal's permission for his/her school's involvement in this study. Location was again a selection criterion with the six schools located in four boards. The screening questionnaire was then administered and 6 schools selected from the nominated 12 as described above.

The total sample of 12 selected schools in the study consisted of nine elementary and three secondary schools from ten different boards of education widely distributed across southern Ontario.

Following sample selection, appointments for on-site interviews were arranged in consultation with the principals. Principals were asked to select, as respondents for interviews: (a) members of any committee set up specially for the school improvement effort; (b) classroom teachers not on such a committee and; (c) the principal. A total of

133 interviewees (m=11.1 per school) were conducted. Principals were also asked to provide whatever documents were available relating to the change process.

Data Collection

Data were collected by two interviewers during a two-day visit to each school using two versions of a semi-structured instrument intended to identify key elements in the change process as perceived by the respondent. A 41-item instrument version of the used was for principals and a 35-item instrument for all other staff. Most of the items were identical on the two instruments; the principal's questionnaire included several items providing more general information about the school and its relationship to the board. Items were based on concepts derived from theories of planned change and included several items from a short interview schedule developed for the Ministry SIP and several others adapted from the Huberman and Miles (1982) study. The time spent with respondents varied from 40 minutes to about 2 hours, with principals averaging about 90 minutes and other staff about 50. The interviewer audio-recorded and took notes on each interview. Later the tapes were used to develop a more complete transcript of the interview.

Data Analysis

The procedure used to analyze the interview data was adapted from the work of Miles and Huberman (1984) on qualitative analysis. A causal network with an accompanying narrative was developed for each school. After some initial training, five-person teams of analysts (graduate students) were each assigned the data for two schools, giving each team about twenty-three interviews to analyze. The division of labour varied within the teams. In general, however, each group read each transcript and then re-read, listening to the interview tape, noting significant omissions in the transcript. Five matrices were constructed for each interview respondent and then used as the basis for developing composite matrices for each school. Entries for a matrix were identified by a code on the individual transcripts. The following are the formats for the matrices that were developed:

- Event by Time Matrix - Events such as meetings, decisions or relevant actions were noted and placed into the appropriate cell indicating the phase of the improvement process during which it occurred, i.e., planning , implementation or current;

- Role by Time Matrix - Roles such as principal, teacher, student, consultant, senior administrator, etc. were described for the phases as in the previous matrix;

- Group Composition by Responsibility Matrix - In this matrix members of groups relevant to the improvement process were identified (usually by role). The responsibility assumed by the group was described as was any change across phases;

- Obstacle Type by Source Matrix - Obstacles such as lack of knowledge or skill, lack of motivation or incentive and lack of resources or appropriate organizational arrangements were recorded with a description of the obstacle's source and location in the process;

- Effects Matrix - Effects of the innovation process on such areas as relationships, attitudes, knowledge, skill, action or behaviour, policies, organizational structure or decision-making processes were described. The effects were classified as intended or unintended and then whether they were positive or negative.

After all school matrices were completed, analysts reviewed them to identify antecedent, mediating and outcome variables, this lead to the production of a comprehensive network variable list. Analysts then returned to their school matrices and developed causal network fragments to test their assumptions about the relationships of these variables to each other. Gradually, these fragments were synthesized into causal networks representing the change process in each school. Each team then wrote a verbal description of the relationships among the variables in the causal networks for the two schools for which they were responsible. In order to ensure the reliability of the causal

networks developed by the teams of analysts, the researchers met with the teams biweekly to monitor progress and ensure consistency in analytic procedures. These were also occasions for additional training as needs became apparent. A further safeguard on reliability was introduced after the teams of analysts had completed their work. One of the researchers (Jantzi) reviewed each set of transcripts (also listening to the original tapes on occasion) against each causal network. This led to a number of refinements and revisions of the original networks.

Thus verified, each network and accompanying narrative was returned to the appropriate school with the request that it be reviewed by staff and principal and any differences in interpretation be reported to the researchers by the principal.

Results and Discussion

This section is organized around the three sets of research questions: the extent to which schools achieved collaborative cultures, the significance of the larger context in which cultural change took place and strategies used by school administrators to foster cultural change.

Extent To Which Schools Achieved Collaborative Cultures

> My colleagues are really good. When I was on the grade 1 team and teaching grade 1 for the first time the team took me under their wing; for example, they would leave work in my mail box. They're not horders. In our team planning we all took a share; we all pulled our weight... There's more sharing and communication among teachers about students, their needs, progress and problems. More teachers are aware of student problems and styles that will make a difference.

This teacher's remarks lent weight to the claim that, within her school, there was a collaborative or "shared, technical" staff culture. Similar remarks can be found in teacher transcripts for all case schools. However, since this study was concerned to discover what school administrators did to foster such cultures, more systematic assurance that collaborative cultures had been achieved to a substantial degree was necessary.

To provide this assurance, we adopted six indicators of collaboration from the work of Judith Little (1982). Her research suggested that, in exceptionally effective schools with shared technical cultures:

- Teachers engage in frequent, continuous and increasingly concrete and precise talk about teaching practices. (p.331)

- Teachers are frequently observed and provided with useful (if potentially frightening) critiques of their teaching. (p. 331)

- Teachers plan, design, research, evaluate and prepare teaching materials together (p. 331)

- Teachers teach each other the practice of teaching. (p. 331)

These and other features of such schools, Little found, could best be explained by two prevailing norms shared by staff:

- a norm of collegiality (the meaning of which is nicely illustrated in the quotation beginning this section);

- a norm of continuous improvement.

Given these four specific and two more general indicators of collaboration, a content analysis was carried out of the transcribed interviews conducted with the principal and all teachers in each of the 12 case schools. Table 1 summarizes the results of this analysis. For each school, there is recorded the number of teachers who made statements indicating the presence of each criterion. Whether or not the principal provided such evidence is also indicated.

Insert Table 1 About Here

Data in Table 1 suggest that the cultures of the 12 schools, as a whole, were characterized by relatively high degrees of collaboration, although there is no objective standard available for making this judgement. Across all criteria, an average of approximately 70% of staff provided evidence of collaboration. This average rises to

80% if the observation criterion is not included. Teachers provided little evidence of frequent classroom observation and feedback (M=16%), consistent with evidence reported earlier by Little (1982). Observation and especially *critical* feedback may violate what Corbett, Firestone and Rossman (1987) refer to as a "sacred" norm of teaching. This non-evaluative norm, with respect to one's peers, is often reinforced in codes of ethics promoted by teachers' professional associations. The greatest percentage of teachers provided evidence of continuous, practical, concrete talk about teaching practice (M=95%).

In spite of the high levels of collaboration evident in the schools as a whole, there was significant variation across the schools - as indicated in the final row of data in Table 1. To better understand reasons for variation, the three schools with the lowest levels of collaboration (cases 1, 5 and 11) were compared with the three schools having the highest levels (cases 9, 10 and 12). Data displayed in the causal networks suggested two possible reasons for these differences. First, in the three lowest scoring schools, there was little indication in the initial stages of the improvement projects, of strong motivation among staff members to participate; their commitment to the project emerged, in all cases, but much later in the process. In contrast, staff motivation to participate was strong from the beginning in two of the three high scoring schools; in the third, the principal quite quickly replaced staff who were not keen to participate with staff who were. Early and sustained motivation of teachers to engage in school improvement, therefore, may be a crucial determinant of at least the speed with which collaborative cultures develop. Actions by principals to foster early enthusiasm among teachers for the school improvement effort may contribute significantly to their predispositions toward collaboration.

A second possible reason for differences in levels of collaboration across schools may be found in the variable we label goal clarification. The 3 schools which achieved the most collaborative cultures arrived at a set of clear, shared goals for school improvement in the context of substantial staff cohesiveness and/or collaborative decision-making. Goal clarification in 2 of the other 3 schools, in contrast, was stimulated directly by the principal or a leadership team prior to the development of much staff cohesiveness or collaborative decision-making. In the third school, goal clarification did not occur. (We comment in more detail later on the importance of goal clarification.)

The nature of collaboration varied across the schools in ways not always evident in Table 1. For example, in school 9 there was much evidence of joint work but this was mostly work in pairs and almost all of it involved the principal as one member of the pair. While this form of collaboration seems to have been useful in meeting the immediate school improvement goals, it leaves the school culture especially vulnerable should there be a change in principal. Collaboration in the three secondary schools also seemed different than in elementary schools. In these schools, joint work was usually within departments; they were "balkanized", in some respects (Hargreaves, 1990). Nevertheless, in-service work was frequently carried out across departments as was talk about teaching. Overall, the norms of collegiality and continuous improvement were as evident in secondary as in elementary schools.

In sum, we interpret these data as evidence of school cultures showing relatively extensive collaboration. It is reasonable, therefore, to take up questions concerned with how such cultures developed in these schools.

Significance Of The Larger Context For Cultural Change

> The (School Improvement Project) gave a more integrated and united focus on what every individual teacher would try to do, things that normally wouldn't be spelled out. It helped unify the school's instructional focus and the things we wanted to do through learning were important for everyone...we had support all along the way, we just talked to each other for support.

The larger context within which each of the school administrators in our sample of 12 schools worked to develop more collaborative cultures was a school improvement project. The specific purpose of these projects was determined by each school, sometimes in conjunction with central office staff, and varied widely. Some projects focused on staff development, some on the implementation of new curricula; others attempted to use library resources more effectively and increase teachers' repertoire of instructional strategies. One secondary school was involved in a massive effort to individualize instruction, an initiative that touched on virtually every aspect of the school's program, administration, physical organization and culture. Most improvement initiatives were much more modest than this.

To clarify the larger context in which principals worked to develop a more collaborative culture, we have selected one of the 12 cases studies of school

improvement as an illustration. This was a suburban, K-8 school with an ethnically and socially diverse student population of about 400 and a teaching staff of 21. At the beginning of the project (early 1987) the principal had been at the school for three years. She was encouraged to develop the project initially by a senior administrator after she had expressed some unease about instruction in the school. At the outset, teachers also expressed concern about lack of staff cohesiveness. The focus for school improvement became mastering the use of inquiry teaching methods and using them appropriately in the classroom.

Insert Figure 1 About Here

Figure 1 is a causal network depicting the 27 variables involved in the school improvement processes that took place over three years in this school. Complete definitions of these 27 variables, as well as others which appeared in the 12 cases, as a whole are available from the authors. For present purposes, variables referred to directly in the text are briefly defined when they are referred to. Figure 1 also depicts the relationships among variables. Based on the frequency with which variables were mentioned by the 10 staff interviewed for this case, an estimate is provided of whether the influence of the variable was low, moderate or high. In cases where the relationship is negative, a "(-)" appears next to the line joining the variables. Because the present study is focused on the development of collaborative cultures, it is useful to note that four of these 27 variables constitute aspects of such a culture: collegial support, collaborative decision making, staff cohesiveness and strengthened relationships.

A brief narrative will help the reader understand the processes depicted in Figure 1. There were four antecedent variables, of which three had differing but overlapping paths through the mediating variables to the outcomes. Board or district-level endorsement (1) of the Ministry School Improvement Project (SIP) and its invitation to this school was a factor in school administration endorsement (2) as was the principal's perception of staff inertia (4), which had led the school administration to undertake a needs/capacity assessment (3).

The first path begins with board endorsement (1) of the school being designated a SIP school. This endorsement led to board support (9) as a mediating variable in the change process. This support was manifested in available resources (10) as board consultants provided some support and in monetary support (13), particularly for

release time. Both the monetary support and the resources contributed to staff development (17). During the process of their preparation, teachers had made revisions to the board curriculum document that resulted in some external recognition (19). This acknowledgement of their work was a factor in teachers' altered attitudes (22). The staff development variable was related to other outcome variables in patterns that will be described below.

The second, and most significant path, through the causal network begins with school administration endorsement (2) interacting with the needs/capacity assessment (3) to initiate the school improvement effort. This endorsement was reflected in the mediating variable, school administration support (6), which was reinforced by both Ministry (5) and board support (9). School administration support contributed to staff development (17) both directly and indirectly through the principal's support in obtaining whatever limited resources (10) that were available. This support (6) also resulted in the development of leadership influence (11) with the formation of the school improvement team (SIT) which connected with the third path through collaborative decision making (20). Leadership influence in providing inservice was a factor in increased goal clarification (14) which helped to alleviate anxiety and stress (12) and contributed to staff development (17).

An external expert (16) was also crucial in developing greater clarity about goals goals (14) and in staff development (17). As an outcome of teachers' preparation, attitudes altered (22) and knowledge and skills increased (23) leading to changes behaviour and actions (26) as well as professional growth (27).

Staff development contributed to physical and program adjustments (21) to accommodate the inquiry teaching model. These adjustments led to policy changes (24) and strengthened relationships (25) which also were reflected in professional growth (27) and changed behaviour and action (26).

The final path through the network begins with the antecedent variable, staff inertia (4) which influenced the principal to initiate a needs/capacity assessment (3) and led to school administration pressure (7); staff were given a choice of making a three to five year commitment to the SIP or transferring to another school and new staff were hired only if they supported the SIP. This pressure resulted in a high level of user commitment (8) that contributed to collegial support (15) since teachers were willing

to help others so the SIP would be a success. Some of the collegial support was the result of school administration pressure (7) to form planning partners. The pressure to be active in the SIP also resulted in some anxiety and stress (12) as teachers were uncertain how to proceed. The anxiety was partially offset by increased collegial support (15).

As staff supported each other in their SIP activities, there was an increase in staff cohesiveness (18) with new and previous staff pulling together as a team. Cohesiveness had a reciprocal relationship with collaborative decision making (20), which was supported by leadership influence(11). This form of decision making was part of the process with which clarity of goals (14) was developed, as well as contributing to staff development (17). Staff development, in turn, enhanced collaborative decision making among staff colleagues and within classrooms, as staff became more proficient in use of the inquiry teaching method.

Collaborative decision making (20) along with staff development (17) contributed to physical and program adjustments (21) to support the new teaching strategy. In this interaction with the second path, policies were changed (24) and relationships strengthened (25) as noted above. Collaboration also resulted directly in strengthened relationships among staff, among students and between staff and students. Change in relationships was reflected in behaviour and action changes (26) and teachers' professional growth (27).

Figure 1 depicts a comprehensive set of school improvement processes similar, in many respects, to processes found in the other 11 case studies. What significance does this larger context have for the development of collaborative cultures? First, it is important simply to recognize that while "restructuring schools" (in this case their cultures) is a worthwhile reform objective, it is unlikely that people will be motivated to pursue it, as an end in itself. Consistent with the results of other research (e.g., Miles & Huberman, 1984), our case studies suggested that most people were motivated to change by goals much more directly concerned with curriculum and instruction.

Second, the larger context for school improvement, usually focused on "educationally compelling" changes, potentially neutralizes the primary disincentive for increased collaboration with colleagues - the significant additional costs of collaboration, particularly in the initial stages. Increased costs are a function of the time required for

group deliberation as distinct from individual decision making. This time may be added onto the normal work time of staff or require the direct outlay of money to free people from duties during their normal work time. The incentive for collaboration is the perception that these costs are at least balanced by significant benefits. Such perceptions depend on collaboration being viewed, eventually at least, as a powerful means for coping with problems attendant upon implementing "educationally compelling" changes.

A third way in which the larger context for school improvement has significance for developing collaborative cultures is the multiple and diverse opportunities it affords to reinforce the benefits of collaboration. This can be illustrated with reference to Figure 1, for example, by examining the relationships with collegial support (variable 15). This variable emerges as a direct response to pressure from the school administration (variable 7) to begin to implement inquiry teaching strategies and a parallel commitment to that goal by many teachers (variable 8). The development of collegial support, in this case, initiates a process which eventually increases staff cohesion (variable 18) and results in collaborative decision-making (variable 20). But the perception that collegial support is valuable is usefully reinforced by its ability also to help teachers cope with an unintended by-product of school administration pressure, increased anxiety and stress (variable 12).

Finally, as Figure 1 also illustrates, at least understanding the larger context for school improvement allows us to appreciate how significant a force school administrators can be in the development of more collaborative cultures. For example, the principal's support for instructional change (variable 6) in this case was followed by delegation of leadership responsibilities to others, a school improvement team (variable 11), and the need for staff development (variable 17). Both of these variables subsequently fostered a need for collaborative decision making. School administration pressure (variable 7) was similarly pivotal in the development of other aspects of a collaborative culture.

Strategies Used By School Administrators To Influence School Cultures

Understanding the larger context within which a collaborative culture develops draws attention, as we have noted, to the the extent of school administrators' potential influence on that process. In addition, such understanding helps clarify more

specifically what administrators can do in exercising such influence. This matter is addressed here in two stages. First, variables most directly linking school administrators' actions to collaborative cultures are displayed. Then a more detailed analysis of specific leadership strategies is provided.

The relationship between strategies initiated by school administrators and school culture is neither simple nor direct (as Figure 1 illustrates). To better understand the nature of the "space" between the two, we developed a series of cross - case causal fragments (Miles and Huberman, 1984). These are partial versions of completed causal networks, as in Figure 1. They focus, however, on only selected sub-sets of variables and relationships and portray those variables and relationships in a manner that best represents the 12 cases, as a whole.

Figure 2 presents the most direct chains of relationships between administrators' actions and one central attribute of collaborative cultures, strengthened interpersonal relationships among staff. Administrators' actions, for this purpose, were considered to be of only two types: those intended to be helpful, supportive or facilitative (e.g., provision of resources) and those intended to exert pressure for change on teachers (e.g., persuasion of reluctant participants). The designations on each variable H (high), M (moderate) and L (low), signify the frequency of occurrence of these variables and their relationships across the 12 case studies: H = 8 to 12 cases; M = 4 - 7 cases; L = 1 - 3 cases.

Insert Figure 2 About Here

As Figure 2 indicates, the space between supportive administrative actions and strengthened staff relationships is filled with six variables, of which two appeared most frequently (leadership influence and collaborative decision-making). Collegial support and organizational adjustments, appearing moderately often, facilitate the development of collaborative decision-making directly. Collegial support interacts with staff development and user commitment in a few cases. The space between administrator pressure and strengthened relationships is filled with four variables none of which appeared in many of the cases.

These two causal fragments suggest, in sum, that:

- the most direct contributor to the development of strengthened relationships is for staff to be involved in collaborative decision-making;

- the likelihood that staff will participate authentically in such decision making is a function of the amount of support they perceive from colleagues, their commitment to accomplishing their school improvement goals and the opportunities for collaboration provided through adjustments to the organization (e.g., time to meet, suitably structured groups);

- school administrators, have at their disposal activities which are reasonably effective in creating user commitment and suitably adjusting the organization. Delegating power to others in the school seems likely to lead in turn to greater collegial support and forms of staff development that assist in building collegial support.

In order to identify more specific leadership strategies, we relied on the 12 causal networks as well as a content analysis of the interviews with the 12 principals reflecting on their own actions to influence their schools' cultures. In reporting results, we assume high levels of interdependence between strategies used by school administrators to help implement the "educationally compelling" changes in their schools and strategies influencing school cultures. Justification for this assumption can be found in the 12 causal networks.

Results suggested that six broad strategies were used to influence school cultures. School administrators:

- strengthened the school's culture;
- used a variety of bureaucratic mechanisms to stimulate and reinforce cultural change;
- fostered staff development;
- engaged in direct and frequent communication about cultural norms, values and belief;

- shared power and responsibility with others; and
- used symbols to express cultural values.

Each of these broad strategies manifested itself in a range of specific actions. While all school administrators in the study used all strategies, their different choices of methods illustrates this range reasonably well. Each of these strategies will be examined in more detail in the remainder of this section.

Strengthen the school's culture

> Initially the SIT got together to talk about goals for the SIP and then we decided to take everything back to the staff to see what kind of general direction they wanted. We (the whole staff) brainstormed what we needed to do with resource based learning in the school. We broke into groups and decided on a variety of very tight recommendations and after discussion were able to reduce all our ideas to the six subgoals under RBL. We then took on the commitment of working each of these through until we were comfortable they had been achieved.

School cultures are typically quite weak (Firestone & Wilson, 1985). As such, they remain of little consequence in bringing about significant school reform even when they reflect aspects of collaboration. Firestone and Wilson claim that such weakness is a function of (a) ambiguous, excessive, poorly specified purposes; (b) the isolation of teachers from one another and from administrators; and (c) low levels of commitment by staff to the school's purposes. The causal networks (Figure 1, for example) suggested that most school administrators at least implicitly recognized the need to strengthen their schools' cultures and acted in a variety of ways to ameliorate sources of cultural weakness.

All principals in this study, as in the study by Deal & Peterson (1990) engaged in some process to clarify, and prioritize a set of shared goals for the school improvement initiatives (variable 14 in Figure 1) although variations among schools in how this was done have been noted already. This often involved entire school staffs in a process for setting goals, initially, sometimes using a consultant to assist. It also involved efforts throughout the life of many projects to block competing priorities and systematically orient new staff to the goals for school improvement.

Rosenholtz (1989) research has depicted a central role for shared goals in helping to foster a shared, technical culture. For this reason, we examined more closely the relationships associated with this variable in our study. Figure 3, a causal fragment, shows that the relationship between administrators' actions and such goals is quite direct. Establishing collaborative decision making procedures was a moderately frequent prerequisite to goal clarification. In more than half of the case schools, such procedures were used to identify goals and priorities. In most schools, the power to establish goals for school improvement was delegated to or shared with others, usually a school improvement team. This fostered greater participation in the process and prevented the principal's goals from dominating the process (or from being seen to dominate the process). Rosenholtz (1989), explaining similar relationships in her data suggests that "... principals who involve teachers in generating information about the goals of teaching, in scanning and choosing the best alternatives, grant teachers a part in constructing school reality (p. 15)."

Reducing teacher isolation, a second method for strengthening school culture, was accomplished by creating opportunities for staff to influence one another (e.g., creating time for joint planning, holding staff retreats, asking staff to offer workshops to colleagues, encouraging teachers to visit one anothers' classes) and sometimes requiring interaction (e.g., creating working committees assigned specific tasks).

Finally, teacher commitment was stimulated quite directly and forcefully in at least four of the cases. Teachers were given the option, after reasonable opportunities to understand the school's purposes, to stay in the school and devote themselves to those purposes or transfer to another school, with the principal's assistance. In most cases, as well, only new teachers were hired who expressed a prior commitment to the schools' purposes, an action Rosenholtz (1989) also found related to the development of shared goals.

Use of Bureaucratic Mechanisms

> The principal encouraged us to meet with other people at our own grade level. I found that one of the best ways was to get down to business and do some planning because it gives you a different way of looking at things. This year two of us are working together on some units. Initially it was time consuming and we just plodded along doing so much talking, but by the time we were finished we really understood how to go about it.

Bureaucratic mechanisms, as Firestone and Wilson point out, "establish constraints on and opportunities for how teachers teach (1985, p. 278)". Such mechanisms will sometimes support cultural changes by making such changes easier to accomplish or more rewarding to engage in. School administrators reported using a number of such mechanisms to foster directly implementation of school improvement goals and to create more collaborative cultures. These mechanisms included, for example:

- Money (e.g., reallocating existing money for the project, finding new money, buying needed materials);
- Planning and scheduling (e.g., providing time for collaborative planning during the workday, timetabling students to allow teachers to work together, keeping school improvement on the forefront of meeting agendae);
- Decision making structures (e.g., establishing divisional and committee structures, pairing teachers for planning);
- Staffing procedures or, more specifically, what Sashkin and Sashkin (1990) termed "value-based" staffing (e.g., selecting new staff based on improvement priorities and willingness to collaborate, involving staff in hiring decisions);
- Evaluation (e.g., progress with school improvement across school, supervise improvement efforts in individual classrooms).

The last of these mechanisms, especially teacher evaluation, Rosenholtz (1989) found to contribute significantly to teachers commitment to school goals. This contribution occurs, in her view, when teachers believe "that evaluation criteria are ... central to their work, applied frequently and capable of being influenced by their own effort ... (p.27)."

Staff development

> Our principal shares new knowledge and is always questioning where we are, what our strengths and difficulties are. She finds resources for us if she doesn't have the answer. She monitors us and pulls together across divisions. She gets outside help if she sees any need ... Sharing is the key thing here. Because I was new I had extra help with planning. I took my planning to my colleagues and my principal and discussed where the problems lay.

Activities designed "to improve teachers' skill, knowledge, understandings or performance in present or future roles" (Fullan's, 1990, page 3, definition of staff

development) appeared prominently in all 12 causal networks. While staff development and increased collaboration are not linked by any logical necessity, they were linked empirically to at least some aspect of collaboration in all cases. The reasons for such a link are evident in Little's (1982) research which suggested that: "To the extent that school situations foster teachers' recourse to others' knowledge and experience, and to shared work and discussion, teachers are likely to favor some participation in staff development --- staff development appears to have the greatest prospects for influence when there is a prevailing norm of collegiality. (p. 339)

Staff development which acknowledges what can be learned from one's immediate colleagues, as well as others, fosters a collaborative culture and is, in turn, nurtured by that same culture. This reciprocity is evident in the relationships displayed in the causal fragment presented in Figure 4. This fragment shows the chains of variables between school administrators' actions and staff development. The chains consist of eight variables, six of which have been discussed previously as they bare on the development of collaborative cultures. Two variables, monetary support and other available resources, are not related in any way to collaboration but are directly linked to the creation of useful staff development as is supportive action by the principal. Furthermore, school administrators have considerable influence on these two variables directly. Figure 4 suggests, in sum, that useful staff development depends most directly on the commitment of the staff to school improvement goals, the perception of collegial supports and the availability of money and other sources to support staff development activities. School administrators help create useful staff development directly by providing the needed resources and indirectly by fostering staff commitment and a supportive collegial environment. Both of these findings are similar to results reported by Rosenholtz (1989) and by Little (1982, p. 334). Finally, delegating power to others (leadership influence) is a key strategy for building the kind of collegial support that makes staff development relatively meaningful.

Principals reported fostering staff development in both direct and indirect ways. They acted directly by themselves giving workshops to staff in areas of their expertise, assisting teachers in their own classrooms, attending in-service sessions with staff, and sharing information from conferences or workshops which they had attended. Through

such actions principals modelled values considered important in the school (Sashkin & Sashkin, 1990). Less directly, school administrators informed staff of in-service opportunities and encouraged participation, invited "experts" into the school to assist staff, and sent staff to relevant conferences. They also encouraged use of board consultants and provided reading to staff and follow-up with discussion.

Because these activities brought teachers into contact with either the principal, other colleagues in the school or other adults outside the school, they encouraged the use of collaboration as a means for problem solving.

Direct and frequent communication

> In actual planning in half day sessions I was actively involved with a planning team working with consultants. It's important to work through with the teacher to understand each unique classroom setting and the problems that may arise ... I think the thing I've learned (in this process) is that a principal needs to learn as much as she can about a teacher. You need to know your staff thoroughly, listen and shown people you truly care about them. When they realize you are ready to help them realize their goals, you will find a positive and favourable response.

Firestone and Wilson (1985) hypothesize that active communication of the culture is an especially opportune strategy for principals because of the large proportion of their time spent in interpersonal contact. Some research estimates that up to 75 percent of a principal's time is spent in such contact (Willower & Kmetz, 1982; Martin & Willower, 1981). School administrators in our study frequently used such words as "informing", "persuading", "directing", "writing", "negotiating", "counseling", "visiting", and "discussing" to indicate the prevalence of this strategy and the importance they attached to it in pursuing school improvement and greater collaboration. This strategy is not clearly distinguishable from others we have discussed since all, to this point, include an important role for communication. What is different in this case (aside from staff development) is that the school administrator is the source of the communication and, as a result, controls its content more directly than is the case with previously examined strategies.

Share power and responsibility with others

> The SIT [school improvement team] was involved in planning where we are going, looking to the future and getting input from staff in terms of where we think we need to change.

Central to the concept of a collaborative culture is the more equitable distribution of power for decision-making among members of the school. Especially when the focus of the decision-making centres on cross-classroom and school-wide matters, this will involve school administrators at least delegating, if not giving away, sources of power traditionally vested in their positions. Without principals' willingness to do this and teachers' willingness to accept the power thus offered, true collaboration seems unlikely. With power, of course, comes the responsibility for decisions and actions. This has the potential for making the teacher's role in the school much more meaningful, although more complex as well. Teachers, under these circumstances, are professionally more "empowered", a goal of many school reform advocates, at present (e.g., Maeroff, 1989).

The most obvious way school administrators in this study went about sharing power and responsibility was through the establishment of school improvement teams of which they were sometimes members. These teams shared the responsibility for project coordination with principals and assisted principals in many of the strategies already mentioned. Also, these teams served as important links between staff and administration, testing plans and soliciting reactions and ideas. Individual members of these teams often acted as mentors or role models for their colleagues; they shared expertise, tried out new ideas in their classes and encouraged conversation about the school improvement effort.

Use symbols and rituals to express cultural values

> Every staff meeting starts with 'good news' about the school, something I've seen in the classroom or they tell us ... at the end of the year we always have a celebration of sorts where we look back at achievements and celebrate what we've achieved. Our newsletter mentions teachers and talks about their accomplishments ... Children have been involved in things like the safety patrol, assemblies and daily announcements. A strong sense of community has been developed in the school because they children identify with other mascot.

Sashkin and Sashkin (1990), Deal and Peterson (1990) and Firestone and Wilson (1985) suggest this strategy as a promising one through which principals can influence school culture. As others point out, symbols are visible expressions of the content of an organization's culture (Schein, 1985; Peters, 1978; Pfeffer, 1981). Manipulating such symbols and rituals, therefore, is a way to make more visible those aspects of the culture that principals believe are valuable.

In our study, principals explicitly mentioned three ways in which they used symbols and rituals to foster collaboration. At staff meetings and assemblies principals celebrated and publically recognized the work of staff and students which contributed to their school improvement efforts. This action invited others to share in the successes of their colleagues. Principals also wrote private notes to staff expressing appreciation for special efforts. This action demonstrated to individuals the value attached to some practices by the principal and the possibility of recognition by an esteemed colleague. Staff were encouraged, thirdly, to share experiences with their colleagues, both as a source of stimulation for colleagues and also for recognition by other adults.

Each of these ways of using symbols and rituals have the potential of contributing to an increase in teachers' professional self esteem. This is a pivotal variable to influence, in building a collaborative culture, according to Rosenholtz's (1989) research, a variable which increases the likelihood that teachers will feel "safe" in revealing their work to others.

Our study suggests, in sum, that principals used six strategies to influence the culture of their schools and to foster greater collaboration. They strengthened the culture, modified bureaucratic mechanisms and engaged in staff development. In addition, principals communicated frequently and directly with staff, shared power and used symbols to express cultural values. A wide range of specific actions were taken by school administrators to pursue each strategy and some actions served multiple purposes.

Summary and Implications

The study was prompted by evidence that variation in schools' cultures explain a significant proportion of the variation in staff practices and student outcomes across schools. Furthermore, one type of staff culture, which we have called "collaborative" or "shared and technical" appeared to foster practices most conducive to the types of both

student and staff development which are the focus of current school reform efforts. We also believed that evidence in support of the claim that school administrators can have a significant impact on schools was compelling but not available specifically in relation to school culture. Indeed, in our own recent research with secondary school administrators, the relationship between their practices and their schools' cultures was extremely weak. (Lawton & Leithwood, 1988). Why was this case, we wondered. Is it because school culture has not been a focus of their work? Or have they tried to influence school culture and failed? These questions stimulated our inquiry into what nine elementary and three secondary principals did to help develop collaborative cultures in their schools. These were schools known to have such cultures and also to have experienced success in their school improvement efforts over at least a three year period. From previous work, we hunched that a conception of leadership as "transformational" suggested strategies most likely to foster the development of collaborative cultures.

After systematically assessing the extent of collaboration in each school, data collected through detailed interviews with, on average, 11 staff in each of the 12 schools were used to help answer two questions. The first question asked about the significance of the larger school improvement context for the development of collaborative cultures. We found that this larger context provided important incentives for initiating collaboration and continuously reinforced the value of collaboration over time. Second, we asked what strategies principals used to foster greater collaboration and were able to identify six. These included strengthening the culture, using bureaucratic mechanisms, fostering staff development, frequent and direct communication, sharing power and responsibility and using rituals and symbols to express cultural values.

The study provides support for the claim that principals have access to strategies which are "transformational" in effect and, hence, assist in the development of collaborative school cultures. This means two things in our view: significant changes in staff members' individual and shared understandings of their current purposes and practices; and an enhanced capacity to solve future professional problems, individually and collegially.

The transformational effect of the strategies identified in the study may be explained by the ways in which they alter the patterns of interaction among staff. Because meaning is socially constructed (Berger & Luckmann, 1965), differences in the patterns of

interactions experienced by school staff will result in differences in the meanings which they associate with their work. The meaning an individual staff member brings to his/her work is a product of the schemata he or she possesses in relation to that work. Borko and Livingston (1990), for example, identify the specific scripts, mental scenes and propositional structures that make up the schemata expert teachers bring to their instructional practices. Such schemata are the cognitive guides to action growing out of the teacher's assumptions, norms, values and beliefs about, for example, the role of teacher and the nature of effective instruction. Alterations in the school culture and accompanying changes in staff practices, therefore, depend on changes in the individual schemata guiding a staff member's practices. Such alterations in cognitive structure, however, must eventually coalesce around schematic content that is, in some optimum measure, common across individuals. This recaptulation of similar cognitive processes at different levels of social structure (Mehan, 1984) is a more complex type of change to assist with than schematic change within an individual alone, especially since each staff member's starting points will necessarily be different. Leithwood and Steinbach's (in press) study attempted to address this matter.

In a traditional, isolated, professional culture, these schemata are adapted, extended and linked together in new ways primarily in response to students. Such social negotiation of meaning will usually take place indirectly; that is, teachers will have to infer the implications for their purposes and practices from students' responses. These responses rarely challenge teachers to reflect directly on their basic assumptions and values. Indeed, relying primarily on the negotiation of meaning with students, as Rosenholtz (1989) found, seems likely to encourage a gradual narrowing of purpose, downsizing of the teacher's aspirations for students and increased weight given to practices which are successful in managing classroom behavior. Rarely, in an isolated professional culture, will teachers' assumptions, norms, values and beliefs be challenged by significantly more ambitious visions of what is possible.

Collaborative cultures, on the other hand, potentially confront teachers with a different order of dissonance about purposes and practices to which they must adapt their classroom schemata. The social negotiation of such meaning will often be quite direct; it also has the power to challenge the teacher to reconsider basic assumptions and values. Unlike students, other peers (including principals as well as teachers) are much more likely to stimulate the teacher to consider more ambitious purposes and non-trivial modifications in their practices as a way of achieving such purposes.

The potential effects of the six strategies used by school administrators to influence school culture which we identified in this study can be explained from this theoretical perspective. Three of these strategies provide principals and other teachers with opportunities to clarify explicitly the preferred content of relevant schemata from their point of view: using symbols and rituals to express cultural values; direct and frequent communication; and staff development. More interactive versions of these strategies allow for the negotiation of schematic content between principal and teachers or between teachers. Several of the six strategies appear to constrain the range of schematic content available to the teacher rather.than to dictate its precise form. This seems the case with the use of bureaucratic mechanisms. Finally, sharing power and responsibility may provide a stimulus for developing shared meaning (effecting the strength of the culture) without necessary reference to the meaning itself (the content of the culture). If principals share power with those who hold similar points of view, however, this strategy is more prescriptive of the schematic content possessed by principals.

Important questions for further research emerge from this discussion: How do different types of social interaction among staff influence change in professionally relevant individual schemata? How do the different forms of social interaction available in the school effect the development of shared meaning? What forms of social interaction might best be fostered by school administrators' attempting to develop more collaborative cultures? These questions echo a focus for research advocated by Rogoff as a result of her work on "situated cognition"; she believes there is much to be gained by studying the influences of differently organized learning experiences on the development of cognitive skills. Because this study was correlational in design and small with respect to sample size, it is important also to follow-up directly the claims which we made regarding transformational leadership strategies and their relationships to school culture.

Among the several findings of this study, we can be most confident in the evidence suggesting that, given a span of two to three years, school cultures can become much

more collaborative. To this extent, restructuring of schools, of the type in this study at least, seems possible without the expenditure of extraordinary human or financial resources. We can also be reasonably confident that actions of school administrators are a significant part of this restructuring process. Taken together, such actions constitute a form of leadership we have labelled transformational. The present study provides a more detailed account, than have previous studies, of the strategies associated with such leadership.

Table 1 --- Estimating the extent to which case schools achieved a "shared technical culture"

		Talk: Frequent, Continuous, practical concrete talk about teaching practice		Observation: Frequent observation and useful feedback provided		Joint Work: Plan, design, evaluate, prepare materials together		Opportunity to learn from one another: instruct one's collegues		Norm of Collegiality sense that teachers are close, work together		Norm of Continuous Improvement		Total	
Case	(N)	Teachers(%)	PR	Teachers(%)	PR	Teachers(%)	PR	Teachers(%)	PR	Teachers(%)	PR	Teachers(%)	PR	Teacher(%)	PR
1	10	10(100)	√	3(30)	√	3(30)	√	4(40)	√	8(80)	√	6(60)	√	(57)	1.0
2	8	8(100)	√	0		7(88)	√	3(38)		8(100)	√	7(88)	√	(69)	0.7
3	12	12(100)	√	1(8)	√	9(75)	√	8(67)	√	11(92)	√	9(75)	√	(70)	1.0
4	12	11(92)	√	0		10(83)	√	11(92)	√	8(67)	√	8(67)	√	(67)	0.8
5	10	9(90)	√	1(10)		6(60)	√	7(70)	√	9(90)		6(60)	√	(63)	0.6
6	4	4(100)	√	0		3(75)	√	3(75)	√	4(100)	√	4(100)	√	(75)	0.8
7	15	14(93)	√	1(7)		12(80)	√	12(80)	√	10(67)	√	9(60)	√	(65)	0.8
8	12	11(92)	√	0		12(100)	√	5(42)	√	11(92)	√	9(75)	√	(67)	0.8
9	14	13(93)	√	3(21)	√	13(93)	√	12(86)	√	12(86)	√	12(86)	√	(78)	1.0
10	9	8(89)	√	5(56)	√	9(100)	√	7(78)	√	9(100)	√	5(56)	√	(80)	1.01
11	6	6(100)	√	0		4(66)	√	5(83)	√	4(66)	√	4(66)	√	(64)	0.8
12	9	9(100)	√	5(56)	√	7(78)	√	9(100)	√	8(89)	√	8(89)	√	(85)	1.0
Total	121	115(95)	12(100)	19(16)	5(42)	95(79)	12(100)	86(71)	11(92)	102(84)	11(92)	87(72)	12(100)		

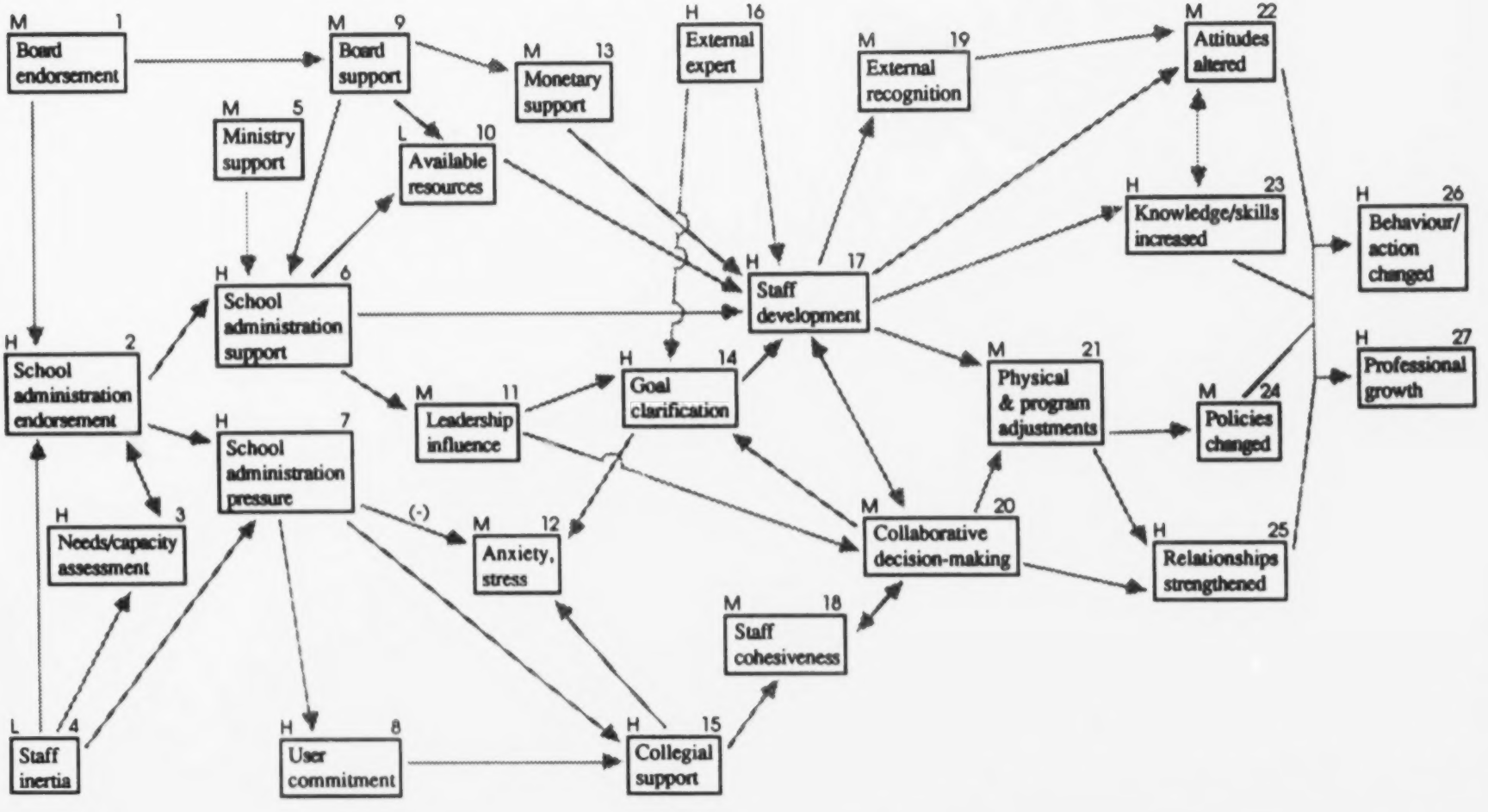
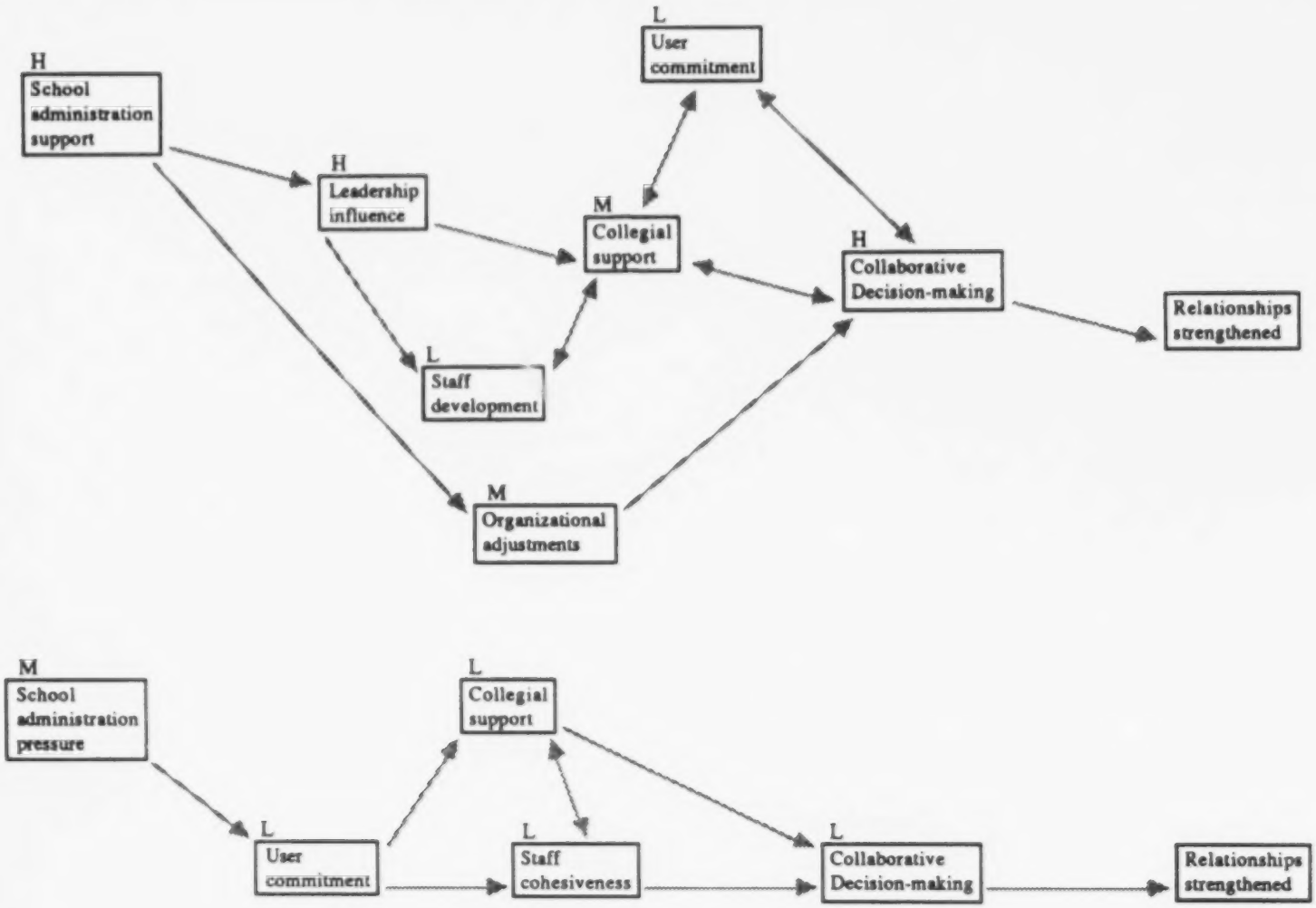


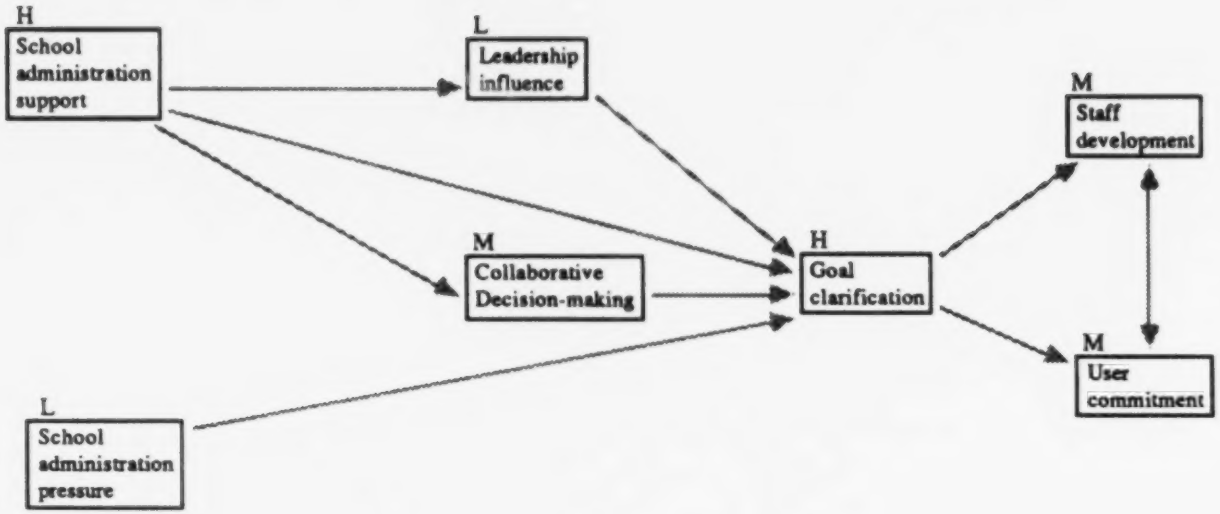
Figure 1: Causal network for one school



Frequency

L = 1 - 3
M = 4 - 7
H = 8 - 12

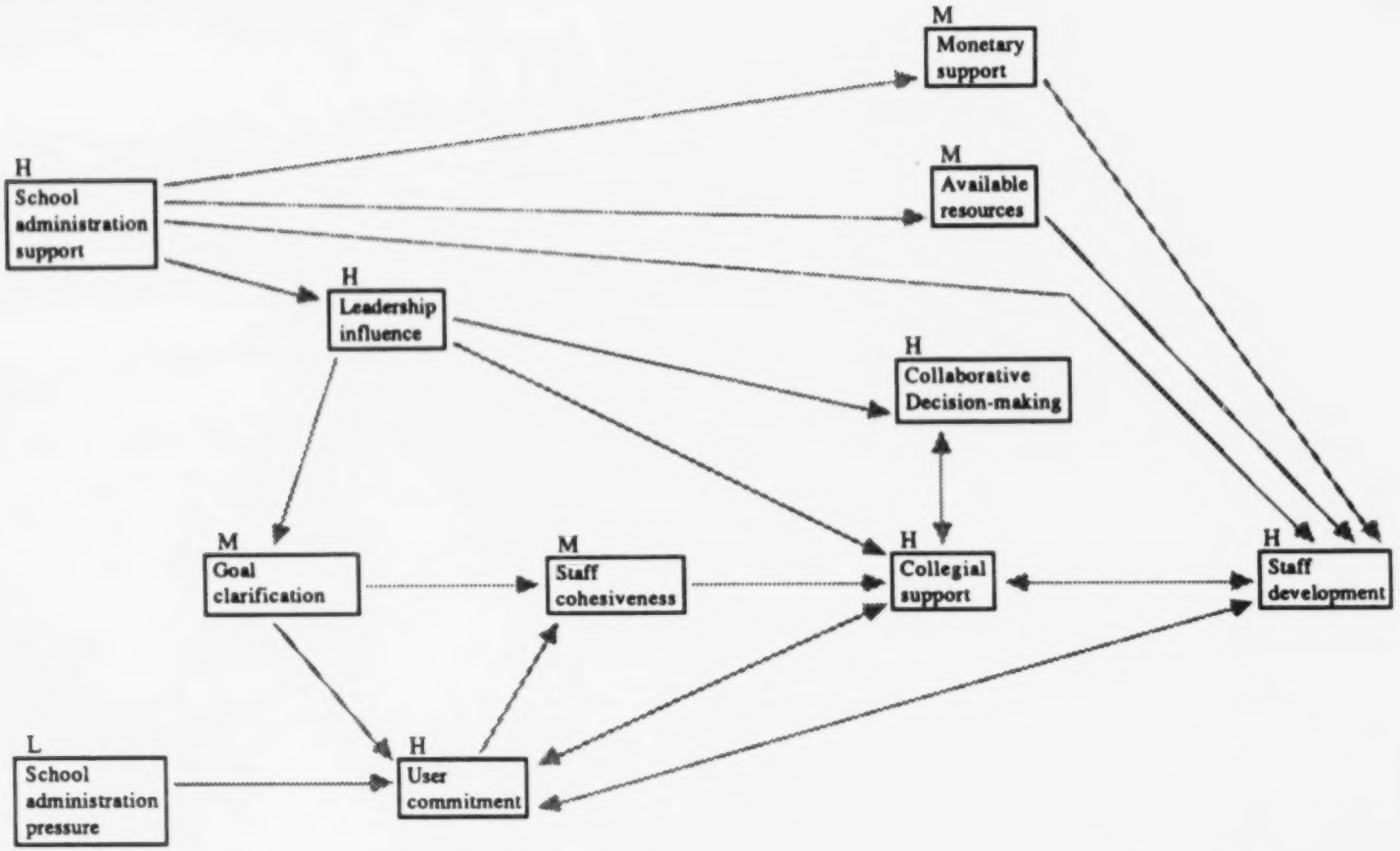
Figure 2: The variables and relationships linking administrators' actions and collaborative school cultures



Frequency

L = 1 - 3
M = 4 - 7
H = 8 - 12

Figure 3: The variables and relationships linking administrators' actions and goal clarification



Frequency

L = 1 - 3
M = 4 - 7
H = 8 - 12

Figure 4: The variables and relationships linking administrators' actions and staff development

References

Bacharach, S.B. (1988). Four themes of reform: an editorial essay. Educational Administration Quarterly, 24(4), 484-496.

Bandura, A. (1977). Social Learning Theory. Englewood Cliffs, N.J.: Prentice Hall.

Bennis, W., Nanus, B. (1985). Leaders: The Strategies For Taking Charge. New York: Harper & Row.

Berger, P.L., Luckmann, T. (1966). The Social Construction of Reality. Garden City, N.J.: Doubleday.

Borko, H., Livingston, C. (1989). Cognition and improvisation: differences in mathematics instruction by expert and novice teachers. American Educational Research Journal, 24(4), 473-498.

Corbett, H.D., Firestone, W.A., Rossman, G.B. (1987). Resistance to planned change and the sacred in school cultures. Educational Administration Quarterly, 23(4), 36-59.

Damon, W., Phelps, S.E. (1989). Critical distinctions among three approaches to peer education. International Journal of Educational Research, 13(1), 9-18.

Deal, T., Peterson, K. (in press). Principal's Role in Shaping School Culture. U.S. Office of Educational Research and Improvement.

Erickson, F. (1987). Conceptions of school culture. Educational Administration Quarterly, 23(4), 11-24.

Fiemen-Nemser, S., Floden, R.E. (1986). The cultures of teaching. In M.C. Wittrock (Ed.). Handbook of Research on Teaching. New York: Macmillan.

Firestone, W.A., Wilson, B.L. (1985). Using bureaucratic and cultural linkages to improve instruction: the principal's contribution. Educational Administration Quarterly, 21(2), 7-30.

Foster, W. (1989). School leaders as transformative intellectuals: a theoretical argument. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, March.

Fullan, M. (1990). Staff development, innovation and institutional development. In B. Joyce (Ed.). Changing School Culture Through Staff Development. Alexandria, VA.: The Association For Supervision and Curriculum Development.

Fullan, M. (1982). The Meaning of Change. New York: Teachers College Press.

Fullan, M., Connelly, M. (1987). Teacher Education In Ontario. Toronto: Ministry of Colleges and Universities.

Gideonese, H.D. (1988). Practitioner-oriented inquiry by teachers: meaning, justification and implications for school structure. Journal of Curriculum and Supervision, 4(1), 65-76.

Hargreaves, A. (1990). Individualism and individuality: reinterpreting the teacher culture. Paper presented at the Annual Meeting of the American Educational Research Association, Boston, April.

Hargreaves, A., Wignall, R. (1990). Time for the teacher: A study of collegial relations and preparation time use among elementary school teachers. Toronto: OISE, mimeo.

Huberman, A.M., Miles, M.B. (1982). Innovation Up Close: A Field Study In Twelve School Settings. Andover, MA.: The Network Inc.

Joyce, B., Bennet, B., Rolheiser-Bennet, C. (1990). The self-educating teacher: empowering teachers through research. In B. Joyce (Ed.). Changing School Culture Through Staff Development. Alexandria, VA.: The Association For Supervision and Curriculum Development.

LaRocque, L., Coleman, P. (in press). Negotiating the master contract: transformational leadership and school district quality. In K. Leithwood and D. Musella (Eds.). Understanding School System Administration: Studies of the Contemporary Chief Education Officer.

Lawton, S.B., Leithwood, K.A. (1988). Student Retention and Transition In Ontario High Schools. Toronto: Ontario Ministry of Education.

Leithwood, K.A. (1990). The principal's role in teacher development. In B. Joyce (Ed.). Changing School Culture Through Staff Development. Alexandria, V.A.: ASCD.

Leithwood, K.A., Steinbach, R. (in press). Indicators of transformational leadership in the everyday problem solving of school administrators. Journal of Personnel Evaluation In Education.

Leithwood, K.A., Cousins, B., Begley, P. (in press). The nature, causes and consequences of what principals do. Journal of Educational Administration.

Leithwood, K.A., Cousins, B., Begley, P. (in press). The nature, causes and consequences of what principals do. Journal of Educational Administration.

Little, J. (1982). Norms of collegiality and experimentation: workplace conditions of school success. American Educational Research Journal, 19(3), 325-340.

Little, J. (1989). The mentor phenomenon and the social organization of leading. Review of Research in Education, 5(16). Washington, D.C.: American Educational Research Association.

Maeroff, G.I. (1989). A blueprint for empowering teachers. Phi Delta Kappan, 69(7), 472-477.

Martin, W.J., Willower, D.J. (1981). The managerial behavior of high school principals. Educational Administration Quarterly. 17(1), 69-90.

Mehan, H. (1984). Institutional decision-making. In B. Rogoff & J. Lave (Eds.) Everyday Cognition: Its Development In Social Context. Cambridge, Mass.: Harvard University Press, 41-66.

Miles, M.B., Huberman, A.M. (1984). Qualitative Data Analysis: A Sourcebook of New Methods. Beverley Hills, CA.: Sage.

Nias, J., Southwork, G., Yeomans, R. (1982). Understanding the Primary School as an Organization. London: Cassells.

Peters, T.J. (1979). Symbols, patterns and settings: an optimistic case for getting things done. Organizational Dynamics, 7, 2-23.

Pfeffer, J. (1981). Management as symbolic action: the creation and maintenance of organizational paradigms. In Cummings, L.L. and Staw, B.M. (Eds.) Research In Organizational Behavior, Vol 3. Greenwich, Conn.: JAI Press.

Rogoff, B. (1984). Introduction: thinking and learning in social context. In B. Rogoff & J. Lave (Eds.). Everyday Cognition: Its Development In Social Context. Cambridge: Harvard University Press, 1-8.

Rosenholtz, S. (1989). Teachers' Workplace. New York: Longmans.

Sashkin, M., Sashkin, M.G. (1990). Leadership and culture building in schools. Paper presented at the Annual Meeting of the American Educational Research Association, Boston, April.

Schneider, B., Hochschild, J. (1988). Career Teachers' Perceptions of the Teaching Culture. Chicago: University of Chicago Press., mimeo.

Shein, E.H. (1985). Organizational Culture and Leadership: A Dynamic View. San Francisco: Jossey-Bass.

Shulman, L.S., Carey, N.B. (1984). Psychology and the limitations of individual rationality: implications for the study of reasoning and civility. Review of Educational Research, 54(4), 501-524.

Simon, H., (1957). Administrative Behaviour: A study of decision-making processes in administrative organizations. New York: Free Press.

Su, Xhixin (1990). The function of the peer group in teacher socialization, Phi Delta Kappan, May, p. 723-727.

Vygotsky, L.S. (1978). Mind In Society. Cambridge: Harvard University Press.

Willower, D.J., Kmetz, J.T. (1982). The managerial behavior of elementary school principals. Paper presented at the Annual meeting of AERA, New York, April.

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